



SEQUENCE LISTING

<110> Ribaud and Shields

<120> B2 Microglobulin Fusion Proteins and High Affinity Variants

<130> 67022

<140> 10/727,000

<141> 2003-12-02

<150> 09/719,243

<151> 2001-03-19

<150> PCT/US99/12309

<151> 1999-06-03

<150> 60/088,813

<151> 1998-06-10

<160> 20

<170> PatentIn Ver. 2.0

<210> 1

<211> 119

<212> PRT

<213> Homo sapiens

<400> 1

Met Ser Arg Ser Val Ala Leu Ala Val Leu Ala Leu Leu Ser Leu Ser
1 5 10 15

Gly Leu Glu Ala Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg
20 25 30

His Pro Ala Glu Asn Gly Lys Ser Asn Phe Leu Asn Cys Tyr Val Ser
35 40 45

Gly Phe His Pro Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu
50 55 60

Arg Ile Glu Lys Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp
65 70 75 80

Ser Phe Tyr Leu Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp
85 90 95

Glu Tyr Ala Cys Arg Val Asn His Val Thr Leu Ser Gln Pro Lys Ile
100 105 110

Val Lys Trp Asp Arg Asp Met
115

<210> 2

<211> 339

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: fusion protein

<400> 2

Met	Val	Ser	Val	Glu	Thr	Gln	Ala	Tyr	Phe	Asn	Gly	Thr	Ala	Tyr	Leu	
1				5				10						15		
Pro	Cys	Pro	Phe	Thr	Lys	Ala	Gln	Asn	Ile	Ser	Leu	Ser	Glu	Leu	Val	
			20					25					30			
Val	Phe	Trp	Gln	Asp	Gln	Gln	Lys	Leu	Val	Leu	Tyr	Glu	His	Tyr	Leu	
			35				40					45				
Gly	Thr	Glu	Lys	Leu	Asp	Ser	Val	Asn	Ala	Lys	Tyr	Leu	Gly	Arg	Thr	
			50				55					60				
Ser	Phe	Asp	Arg	Asn	Asn	Trp	Thr	Leu	Arg	Leu	His	Asn	Val	Gln	Ile	
			65			70				75					80	
Lys	Asp	Met	Gly	Ser	Tyr	Asp	Cys	Phe	Ile	Gln	Lys	Lys	Pro	Pro	Thr	
				85					90					95		
Gly	Ser	Ile	Ile	Leu	Gln	Gln	Thr	Leu	Thr	Glu	Leu	Ser	Val	Ile	Ala	
			100					105					110			
Asn	Phe	Ser	Glu	Pro	Glu	Ile	Lys	Leu	Ala	Gln	Asn	Val	Thr	Gly	Asn	
			115				120					125				
Ser	Gly	Ile	Asn	Leu	Thr	Cys	Thr	Ser	Lys	Gln	Gly	His	Pro	Lys	Pro	
			130				135				140					
Lys	Lys	Met	Tyr	Phe	Leu	Ile	Thr	Asn	Ser	Thr	Asn	Glu	Tyr	Gly	Asp	
					150					155				160		
Asn	Met	Gln	Ile	Ser	Gln	Asp	Asn	Val	Thr	Glu	Leu	Phe	Ser	Ile	Ser	
					165				170					175		
Asn	Ser	Leu	Ser	Leu	Ser	Phe	Pro	Asp	Gly	Val	Trp	His	Met	Thr	Val	
			180					185					190			
Val	Cys	Val	Leu	Glu	Thr	Glu	Ser	Met	Lys	Ile	Ser	Ser	Lys	Pro	Leu	
			195					200					205			
Asn	Phe	Thr	Gln	Glu	Phe	Pro	Ser	Pro	Gln	Thr	Tyr	Trp	Ala	Ser	Thr	
			210				215					220				
Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Ala	Ser	
					230					235					240	
Ile	Gln	Arg	Thr	Pro	Lys	Ile	Gln	Val	Tyr	Ser	Arg	His	Pro	Ala	Glu	
					245				250					255		
Asn	Gly	Lys	Ser	Asn	Phe	Leu	Asn	Cys	Tyr	Val	Ser	Gly	Phe	His	Pro	
			260					265					270			

Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu Arg Ile Glu Lys
 275 280 285

Val Glu His Ser Asp Leu Ser Phe Ser Lys Asp Trp Ser Phe Tyr Leu
 290 295 300

Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp Glu Tyr Ala Cys
 305 310 315 320

Arg Val Asn His Val Thr Leu Ser Gln Pro Lys Ile Val Lys Trp Asp
 325 330 335

Arg Asp Met

<210> 3

<211> 358

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: fusion protein

<400> 3

Met Ser Arg Ser Val Ala Leu Ala Val Leu Ala Leu Leu Ser Leu Ser
 1 5 10 15

Gly Leu Glu Ala Val Ser Val Glu Thr Gln Ala Tyr Phe Asn Gly Thr
 20 25 30

Ala Tyr Leu Pro Cys Pro Phe Thr Lys Ala Gln Asn Ile Ser Leu Ser
 35 40 45

Glu Leu Val Val Phe Trp Gln Asp Gln Gln Lys Leu Val Leu Tyr Glu
 50 55 60

His Tyr Leu Gly Thr Glu Lys Leu Asp Ser Val Asn Ala Lys Tyr Leu
 65 70 75 80

Gly Arg Thr Ser Phe Asp Arg Asn Asn Trp Thr Leu Arg Leu His Asn
 85 90 95

Val Gln Ile Lys Asp Met Gly Ser Tyr Asp Cys Phe Ile Gln Lys Lys
 100 105 110

Pro Pro Thr Gly Ser Ile Ile Leu Gln Gln Thr Leu Thr Glu Leu Ser
 115 120 125

Val Ile Ala Asn Phe Ser Glu Pro Glu Ile Lys Leu Ala Gln Asn Val
 130 135 140

Thr Gly Asn Ser Gly Ile Asn Leu Thr Cys Thr Ser Lys Gln Gly His
 145 150 155 160

Pro Lys Pro Lys Lys Met Tyr Phe Leu Ile Thr Asn Ser Thr Asn Glu

165								170				175			
Tyr	Gly	Asp	Asn	Met	Gln	Ile	Ser	Gln	Asp	Asn	Val	Thr	Glu	Leu	Phe
			180							185			190		
Ser	Ile	Ser	Asn	Ser	Leu	Ser	Leu	Ser	Phe	Pro	Asp	Gly	Val	Trp	His
		195					200					205			
Met	Thr	Val	Val	Cys	Val	Leu	Glu	Thr	Glu	Ser	Met	Lys	Ile	Ser	Ser
	210					215					220				
Lys	Pro	Leu	Asn	Phe	Thr	Gln	Glu	Phe	Pro	Ser	Pro	Gln	Thr	Tyr	Trp
225					230				235						240
Ala	Ser	Thr	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly	Gly	Gly	Ser	Gly	Gly
				245					250					255	
Gly	Ala	Ser	Ile	Gln	Arg	Thr	Pro	Lys	Ile	Gln	Val	Tyr	Ser	Arg	His
			260						265				270		
Pro	Ala	Glu	Asn	Gly	Lys	Ser	Asn	Phe	Leu	Asn	Cys	Tyr	Val	Ser	Gly
		275					280				285				
Phe	His	Pro	Ser	Asp	Ile	Glu	Val	Asp	Leu	Leu	Lys	Asn	Gly	Glu	Arg
	290					295					300				
Ile	Glu	Lys	Val	Glu	His	Ser	Asp	Leu	Ser	Phe	Ser	Lys	Asp	Trp	Ser
305					310					315					320
Phe	Tyr	Leu	Leu	Tyr	Tyr	Thr	Glu	Phe	Thr	Pro	Thr	Glu	Lys	Asp	Glu
				325					330					335	
Tyr	Ala	Cys	Arg	Val	Asn	His	Val	Thr	Leu	Ser	Gln	Pro	Lys	Ile	Val
			340						345				350		
Lys	Trp	Asp	Arg	Asp	Met										
			355												

<210> 4
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<400> 4
 ttcttcagca aggactggtc tttc

24

<210> 5
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<400> 5
 atttttcagca aggactgggc tttc 24

<210> 6
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<400> 6
 gtgttcagca aggactgggc tttc 24

<210> 7
 <211> 24
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<400> 7
 taagtctgaa tgctccactt tttc 24

<210> 8
 <211> 31
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<400> 8
 aggggtaccat ggtttccgtg gagacgcaag c 31

<210> 9
 <211> 40
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: primer

<400> 9
 tcgaattcat gatgctagcc caatacgttt gaggagatgg 40

<210> 10
 <211> 99
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Modified hB2m
 S55V

<400> 10
 Ile Gln Arg Thr Pro Lys Ile Gln Val Tyr Ser Arg His Pro Ala Glu
 1 5 10 15
 Asn Gly Lys Ser Asn Phe Leu Asn Cys Tyr Val Ser Gly Phe His Pro
 20 25 30
 Ser Asp Ile Glu Val Asp Leu Leu Lys Asn Gly Glu Arg Ile Glu Lys
 35 40 45
 Val Glu His Ser Asp Leu Val Phe Ser Lys Asp Trp Ser Phe Tyr Leu
 50 55 60
 Leu Tyr Tyr Thr Glu Phe Thr Pro Thr Glu Lys Asp Glu Tyr Ala Cys
 65 70 75 80
 Arg Val Asn His Val Thr Leu Ser Gln Pro Lys Ile Val Lys Trp Asp
 85 90 95
 Arg Asp Met

<210> 11
 <211> 15
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: linker that
 can be used in fusion proteins

<400> 11
 Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
 1 5 10 15

<210> 12
 <211> 5
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: linker that
 can be used in fusion proteins

<400> 12
 Gly Gly Gly Ala Ser
 1 5

<210> 13
 <211> 21
 <212> PRT
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: signal peptide

<400> 13

Lys Tyr Leu Leu Pro Thr Ala Ala Ala Gly Leu Leu Leu Ala Ala
1 5 10 15

Gln Pro Ala Met Ala
20

<210> 14

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: signal peptide

<400> 14

Met Arg Ala Lys Leu Leu Gly Ile Val Leu Thr Pro Ile Ala Ile Ser
1 5 10 15

Phe Ala Ser Thr
20

<210> 15

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: c-myc tag

<400> 15

Glu Gln Lys Leu Ile Ser Glu Glu Asp Leu Asn
1 5 10

<210> 16

<211> 9

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: ornithine
decarboxylase 309-317

<400> 16

Ser Ser Glu Gln Thr Phe Met Tyr Tyr
1 5

<210> 17

<211> 9

<212> PRT

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HTLV TAX 11-19

<400> 17
Leu Leu Phe Gly Tyr Pro Val Tyr Val
1 5

<210> 18
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: HIV gag 77-85

<400> 18
Ser Leu Tyr Asn Thr Val Ala Thr Leu
1 5

<210> 19
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: pn2a.A3

<400> 19
Lys Leu Tyr Glu Lys Val Tyr Thr Tyr Lys
1 5 10

<210> 20
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: influenza NP
265-273

<400> 20
Ile Leu Arg Gly Ser Val Ala His Lys
1 5